### MICHIGAN DEPARTMENT OF NATURAL RESOURCES

In the Matter of Michigan Animal Farmers Association
Request for Declaratory Ruling

Part 413 (Transgenic and Nonnative Organisms), of the Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended, MCL 324.41301 *et seg*.

Invasive Species Order Amendment No. 1 of 2011

## **DECLARATORY RULING**

December 13, 2011

## **Jurisdiction**

Petitioner, the Michigan Animal Farmers Association, has requested a declaratory ruling from the Michigan Department of Natural Resources (MDNR) concerning the scope and factual application of Invasive Species Order Amendment No. 1 of 2011 issued by the MDNR pursuant to Part 413 (Transgenic and Nonnative Organisms) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. MCL 324.41301, et seq. Both Section 63 of the Administrative Procedures Act, MCL 24.263, and Rule 95 of the administrative rules pertaining to the organization and general functions of the MDNR, MAC R 299.3095, authorize the MDNR, upon request, to issue a declaratory ruling as to the applicability to a state of facts of a statute, rule, or order administered or issued by the department. The MDNR has determined that the issuance of a declaratory ruling in response to the instant request by the Petitioner is appropriate.

# **Background**

MCL 324.41302(1) and (3) authorize the Commission of Natural Resources, by order, to add to or delete from the list of prohibited species or restricted species under MCL 324.41301. That statutory authority was transferred from the Commission to the former Michigan Department of Natural Resources and Environment (MDNRE), by Executive Order 2009-45, effective January 17, 2010, and then to the MDNR, by Executive Order 2011-1, effective March 13, 2011.

On December 9, 2010, after public notice, comment and consultation with the Department of Agriculture, the DNRE issued Invasive Species Order Amendment No. 1 of 2010. That Order provided that, effective July 8, 2011, the Invasive Species Order was amended to read as follows:

"By authority conferred on the Department of Natural Resources by section 41302 of the Natural Resources Environmental Protection Act, 1994 PA 451, as amended, MCL 324.41302, and Executive Orders 2009-45, 2009-54, 2011-1, and 2011-2, and in consultation with the Department of Agriculture, it is ordered that effective July 8, 2011 the following section(s) of the Invasive Species Order shall be amended as follows:

#### 40.4 Additional prohibited species.

- (1) Possession of the following live species, including a hybrid or genetic variant of the species, an egg or offspring of the species or of a hybrid or genetically engineered variant, is prohibited:
  - (a) New Zealand mud snail (potamopyrgus antipodarum).
- (b) Wild boar, wild hog, wild swine, feral pig, feral hog, feral swine, Old world swine, razorback, eurasian wild boar, Russian wild boar (*Sus scrofa Linnaeus*). This subsection does not and is not intended to affect *sus domestica* involved in domestic hog production.
- (c) The department shall consult with staff from the Michigan department of agriculture on the development of a phased compliance protocol for the implementation of this section."

Pursuant to Executive Order 2011-1 dated March 13, 2011, the MNDRE was abolished and its functions, including authority to administer Part 413, were transferred to the MDNR. Pursuant to subsection 40.4(1)(c) of Invasive Species Order Amendment No. 1 of 2010, the MDNR consulted with the Department of Agriculture and Rural Development (the successor agency to the Department of Agriculture under Executive Order 2011-2) on the development of a phased compliance protocol under this section. The MDNR publicly announced that under its phased compliance protocol, it would defer determinations of compliance with the prohibition added by Invasive Species Order Amendment No. 1 of 2010 until after March 31, 2012.

On August 8, 2011 the MDNR issued Invasive Species Order Amendment No. 1 of 2011 (ISO), which provides that effective October 8, 2011, the Invasive Species Order is amended to read as follows:

"By authority conferred on the Department of Natural Resources by section 41302 of the Natural Resources Environmental Protection Act, 1994 PA 451, as amended, MCL 324.41302, and Executive Orders 2009-45, 2009-54, 2011-1, and 2011-2, and in consultation with the Department of Agriculture, it is ordered that effective October 8, 2011 the following section(s) of the Invasive Species Order shall be amended as follows:

#### 40.4 Additional prohibited species.

- (1) Possession of the following live species, including a hybrid or genetic variant of the species, an egg or offspring of the species or of a hybrid or genetically engineered variant, is prohibited:
  - (a) New Zealand mud snail (potamopyrgus antipodarum).
- (b) Wild boar, wild hog, wild swine, feral pig, feral hog, feral swine, Old world swine, razorback, eurasian wild boar, Russian wild boar (*Sus scrofa Linnaeus*). This subsection does not and is not intended to affect *sus domestica* involved in domestic hog production.
- (c) The department shall consult with staff from the Michigan department of agriculture on the development of a phased compliance protocol for the implementation of this section."

Invasive Species Order Amendment No. 1 of 2011 took effect on October 8, 2011. The MDNR has reiterated that under its phased compliance protocol, it will defer determinations of compliance with the prohibition added by Invasive Species Order Amendment No. 1 of 2010 and Invasive Species Order Amendment No. 1 of 2011 until after March 31, 2012.

Declaratory Ruling -2- December 13, 2011

## **Request for Declaratory Ruling**

The Petitioner requests a declaratory ruling as follows:

"Pursuant to MCL § 24.263, "an agency may issue a declaratory ruling as to the applicability to an actual state of facts of ... [an] order of the agency." Here, the actual state of facts are thus: MDNR has issued the ISO which makes it unlawful to possess the above described breeds of swine "or of a hybrid or genetically engineered variant" of those breeds. MAFA's members breed and raise captive swine, and, therefore, they are requesting that MDNR specify and declare, by way of a declaratory ruling, the exact standards that MDNR will be utilizing to determine the hybrid, genetic variants and offspring of prohibited swine. Specifically, what kind of qualitative testing will the MDNR be conducting and what results will determine if a specific animal is a hybrid, genetic variant or offspring of the prohibited swine listed in the ISO?"

## Response

Based upon the recommendations of MDNR staff with relevant experience and who have reviewed available scientific literature and consulted with other scientists, the MDNR has developed the following approach to the identification of animals prohibited under the ISO.

There are two means by which a species can be correctly identified: by genotype or by phenotype. Genotype refers to the unique genetic make-up of the species. Phenotype refers to the *expression* of those genes, which results in specific physical, biochemical, or behavioral characteristics.

In its enforcement of the ISO and Part 413 of 1994 PA 451, as amended, the MDNR will use phenotype to identify *Sus scrofa* and distinguish it from other species. Identification may include use of one or more of the following characteristics (Mayer and Brisbin 2008):

- Bristle-tip coloration: Sus scrofa exhibit bristle tips that are lighter in color (e.g., white, cream, or buff) than the rest of the hair shaft. This expression is most frequently observed across the dorsal portion and sides of the snout/face, and on the back and sides of the animal's body.
- Dark "point" coloration: Sus scrofa exhibit "points" (i.e., distal portions of the snout, ears, legs, and tail) that are dark brown to black in coloration, and lack light-colored tips on the bristles.
- Coat coloration: Sus scrofa exhibit a number of coat coloration patterns. Patterns most frequently observed among wild/feral/hybrid types are: wild/grizzled; solid black; solid red/brown; black and white spotted; black and red/brown spotted.
- Underfur: Sus scrofa exhibit the presence of underfur that is lighter in color (e.g., smoke gray to brown) than the overlying dark brown to black bristles/guard hairs.

Declaratory Ruling -3- December 13, 2011

- Juvenile coat pattern: Juvenile Sus scrofa exhibit striped coat patterns. This consists of a light grayish-tan to brown base coat, with a dark brown to black spinal stripe and three to four brown irregular longitudinal stripes with dark margins along the length of the body.
- Skeletal appearance: Sus scrofa skeletal structure is distinct. Structures include skull morphology, dorsal profile, and external body measurements including tail length, head-body length, hind foot length, ear length, snout length, and shoulder height.
- Tail structure: Sus scrofa exhibit straight tails. They contain the muscular structure to curl their tails if needed, but the tails are typically held straight. Hybrids of Sus scrofa exhibit either curly or straight tail structure.
- Ear structure: Sus scrofa exhibit erect ear structure. Hybrids of Sus scrofa exhibit either erect or folded/floppy ear structure.
- Other characteristics not currently known to the MDNR that are identified by the scientific community.

Ongoing advancements in science may provide additional phenotypic or genotypic tools to aid in the identification of *Sus scrofa*. The MDNR may use these tools as they become available.

The MDNR may use previous inspection data for a facility, as well as advertisements that specify the existence of swine at a facility, as factors for determining whether a facility should be inspected for prohibited swine subject to the ISO.

Issued on this 13<sup>th</sup> day of December, 2011

Rodney A. Stokes Director

Declaratory Ruling -4- December 13, 2011

### **Literature Cited**

Mayer, J.J. and I.L. Brisbin, Jr. 2008. *Wild Pigs in the United States: Their History, Comparative Morphology, and Current Status*. University of Georgia Press, Athens, GA.

## **Additional Reference Material**

Mayer, J.J. (pers.comm.). Savannah River National Laboratory, Savannah River Site, Bldg. 773-42A, Aiken, SC, 29808.

Wild Pig Symposium Proceedings. 2004. U.S. Forest Service – Savannah River, U.S. Department of Energy, Westinghouse Savannah River Company, South Carolina Chapter of the Soil and Water Conservation Society, and University of Georgia. Augusta, Georgia.

Wild Pigs: Biology, Damage, Control Techniques and Management. 2009. Savannah River National Laboratory, Aiken, South Carolina. Report #: SRNL-RP-2009-00869.

Declaratory Ruling -5- December 13, 2011